

## Office of Pollution Prevention and Toxics' Role

**1970s** - EPA has been involved in the issue of asbestos contamination in vermiculite, including the material mined in Libby by W.R. Grace. In 1978, EPA received from O. H. Scott, Inc. notice of substantial risk on the health effects of vermiculite on its workers. This notice initiated OTS' (now OPPT) review of vermiculite exposure.

**1980** - the Office of Toxic Substances (OTS) conducted reviews of vermiculite to determine if it should be included in the then upcoming Asbestos Ban and Phase-out Rule (ABPO). A 1982 EPA contractor report showed that milled and screened vermiculite from W.R. Grace's Libby mine contained between 4-7% asbestos by weight. The report also concluded, using methodologies and assumptions available at the time, that this material contained less than 1% respirable asbestos fibers. At the time, 1% total asbestos by weight was the level of quantification and was used as the level of concern for asbestos containing materials. Due to the fact that there were products on the market with 80-90% asbestos, OTS decided not to pursue vermiculite as a priority. In 1985, an EPA contractor conducted an exposure assessment for OTS of asbestos contaminated vermiculite using the data from the 1982 report. The assessment included occupational, consumer and general population estimates which have raised concerns about risk levels. No risk calculations were included in the report. In 1989, EPA published the Asbestos Ban and Phase-out Rule (ABPO) which banned most current and new uses of asbestos and asbestos containing products. The following table summarizes the products and uses of asbestos that were banned in 1989:

Uses allowed under the final rule	Uses banned under the final rule
acetylene cylinders	asbestos-cement corrugated sheet
arc chutes	asbestos-cement flat sheet
asbestos diaphragms	asbestos-cement pipe
battery separators	asbestos-cement shingle
high-grade electrical paper	asbestos clothing
missile liners	flooring felt
packings	pipeline wrap
reinforced plastic	roof coatings
sealant tape	non-roof coatings
specialty industrial gaskets	vinyl/asbestos floor tile
textile products	automatic transmission components
	clutch facings

	disc brake pads
	drum brake linings
	brake blocks
	commercial and industrial asbestos friction products
	sheet and beater-add gaskets (except specialty industrial gaskets)
	<b>all new uses of asbestos*</b>
	<b>roofing felt*</b>
	<b>commercial, corrugated and specialty paper*</b>
	<b>millboard*</b>
	<b>rollboard*</b>

**\* Products which survived the remand (overturn) and remain banned today.**

**1990s** - An industry backed lawsuit resulted in the overturning of the Asbestos Ban and Phase-out Rule (ABPO). After the court ruling overturning the ABPO, a few product classes and uses did remain banned along with any new uses of asbestos.

<b>Currently banned products and uses</b>
all new uses of asbestos
roofing felt
commercial, corrugated, and specialty paper
millboard
rollboard

**Today** - Currently OPPT and EPA regional offices are updating lists of producers, processors and exfoliators of vermiculite; updating the history of the Libby mine and various government agencies involvements; conducting a literature search on vermiculite and other ores containing asbestos and determining current asbestos levels of asbestos containing materials in the environment through additional sampling and analysis. This effort includes vermiculite products

and construction materials. These efforts will allow us to test the assumptions made in the 1980's using today's scientific methodologies. The Office of Pollution Prevention and Toxics (OPPT) (formerly OTS) has also been asked about the history of our decisions concerning vermiculite, the outcome of the ABPO Rule and whether there is a concern over vermiculite today.